

FGF-8f

Catalog # PVGS1420

Specification

FGF-8f - Product Information

Primary Accession **Species** Human

P55075

Sequence

Gln23-Arg244, expressed with an N-terminal Met

Purity

> 95% as analyzed by SDS-PAGE

Endotoxin Level

< 0.2 EU/ μg of protein by gel clotting method

Biological Activity

ED₅₀ < 50.0 ng/ml, measured by a cell proliferation assayusing 3T3 cellsin the presence of 10.0 μ g/ml of heparin, corresponding to a specific activity of > 2.0 \times 10⁴ units/mg.

Expression System

E. coli

Formulation

Lyophilized after extensive dialysis against PBS.

Reconstitution

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH_2O up to $100 \mu g/ml$.

Storage & Stability

Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

FGF-8f - Additional Information

Gene ID 2253

Other Names

Fibroblast growth factor 8, FGF-8, Androgen-induced growth factor, AIGF, Heparin-binding growth factor 8, HBGF-8, FGF8, AIGF

Target Background

Fibroblast Growth Factor 8f (FGF-8f) is a cytokine belonging to the heparin-binding FGF family, which has at least 23 members. FGF-8 has 8 different isoforms, named FGF-8a through FGF-8h.



Different FGF-8 isoforms have different receptor affinities, and thus participate in different signaling cascade pathways. FGF-8 has widespread expression during embryonic development, promoting gastrulation, somitogenesis, morphogenesis, and limb formation. FGF-8 also has oncogenic potential. While in normal cells FGF-8 is expressed at very low levels, in breast, prostate and ovarian cancer FGF-8 is highly expressed.FGF-8 promotes tumor angiogenesis by increasing neovascularization, and inducing osteoblastic differentiation.

FGF-8f - Protein Information

Name FGF8

Synonyms AIGF

Function

Plays an important role in the regulation of embryonic development, cell proliferation, cell differentiation and cell migration. Required for normal brain, eye, ear and limb development during embryogenesis. Required for normal development of the gonadotropin-releasing hormone (GnRH) neuronal system (PubMed:16384934, PubMed:16597617, PubMed:8663044). Plays a role in neurite outgrowth in hippocampal cells (PubMed:21576111).

Cellular Location Secreted.

FGF-8f - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

FGF-8f - Images